

ATTACHMENT I

ARCO Chemical Company
Research and Development Center
Newtown Square, Pennsylvania
3HW33
PAD 046 538 211

Solid Waste Management Unit (SWMU) Information

-1-

1. Supply a topographic map showing the facility and a distance of 1,000 feet around it, at a scale of one-inch equal to not more than 200 feet. In addition to showing the location of the hazardous waste management facilities for which you are seeking a permit, it must locate all existing and former SWMUs at your facility.

Attached are:

- a. Geological Survey, Media Quadrangle, PA, 7.5 Minute Series (Topographic) Map indicating the ARCO Chemical Company's Research and Development Center facility.
- b. Site Plan East (Drawing 1-01) indicating the one and only existing solid waste management unit (SWMU).
Scale: one inch equal to 200 feet.
- c. Site Plan West (Drawing 1-02)
Scale: one inch equal to 200 feet.

Be advised that the facility is not seeking a Resource Conservation and Recovery Act (RCRA) permit. The facility has a generator only status, as determined by the Pennsylvania Department of Environmental Resources.

2. For each SWMU, provide a description of the unit's functions, materials of construction, dimensions, capacity, ancillary systems (piping), etc. If available, provide engineering drawings of the units and their foundations. For closed facilities, also provide a copy of the closure plans, a description of how closure was performed and any relevant post-closure information you have available.

As with any large integrated research facility, ARCO Chemical Company generates a wide variety of wastes. This diversity applies to the chemical constituents, as well as quantities. Wastes from the analytical laboratories consist primarily of small vials (approximately 20 ml - 100 ml), compared to wastes from the larger pilot units that are produced in drum quantities.

Two types of categories of waste are generated at this site:

1) non-hazardous wastes such as pallets, paper, trash, empty pails and non-leachable plastics, and 2) chemical waste products from the analytical laboratories, small bench scale units and large pilot plants. Extreme care is taken to ensure that chemical waste materials are not commingled with non-hazardous trash.

Chemical wastes are accumulated on the western edge of the storage pad (see Site Plan East, Drawing 1-01). Drums of waste (about 50% of the waste is solid) are segregated by type and placed on pallets until sufficient drums are accumulated for a pickup by a contractor or are shipped before the 90-day accumulation deadline.

Engineering drawings of the solid waste management unit (SWMU) are provided (see Drawings 1-1.3 and 2-3.1).

A typical section of the concrete base, illustrating the spill control drainage pattern, is included on Drawing 1-1.3. The concrete base consists of "drainage sections" approximately 30 feet by 45 feet. Three of these "drainage sections" have been segregated for the hazardous waste accumulation area. The floor drains are unplugged to permit rapid drainage. This drainage, plus storage on pallets, ensures that the bottoms of the drums of waste are not subjected to rapid corrosion and subsequent leaks. In the event of an undetected leak, the open floor drains route the material into the process wastewater system for subsequent treatment or recovery. In the event of an observed spill, the floor drains can be plugged and spill cleanup procedures implemented to recover the wastes.

This facility has not closed a solid waste management unit since the start of operations.

3. **For each SWMU, provide a description of all solid wastes, including hazardous wastes and hazardous waste constituents received by the units. Also, provide information on quantities of hazardous wastes and hazardous waste constituents received by each SWMU and the dates during which these units operated.**

As stated previously, the Newtown Square facility generates a wide variety of wastes due to its research and development activities. To illustrate the typical hazardous wastes and hazardous constituents generated at this facility, we have enclosed (Exhibit I) the quarterly hazardous waste reports for 1985 that were submitted to the Pennsylvania Department of Environmental Resources. We realize that there may be minor variations in waste quantities and types generated from year to year, resulting from our research activities; however, the enclosed reports provide sufficient information to typify our operation. Information for other years of operation may be obtained in the quarterly reports sent to the PaDER.

The SWMU has been in operation since July, 1980.

4. For each solid waste, SWMU, describe any releases (or possible releases) originating at the unit. This should include information on the date of release, type of solid waste, hazardous waste or hazardous waste constituents released, quantity released, nature of the release, extent of migration, and cause of release, for example, an overflow, broken pipe, tank leak, etc. Also, provide any available data which would quantify the nature and extent of environmental contamination, including the results of soil, surface water and/or groundwater sampling and analysis efforts. Likewise, any monitoring information that indicates releases are not present should also be submitted.

The SWMU, to our knowledge, has never had a release of hazardous waste or hazardous constituents that resulted in environmental contamination. Although there have been minor spills (e.g., a broken quart glass bottle), control and corrective procedures were implemented that resulted in immediate cleanup in all known occurrences.

ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073
Telephone 215 359 2001



J. E. Connor, Jr.
Vice President
Research & Development

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 12, 1986

Mr. Stephen R. Wassersug, Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Re: 3HW33
PAD 046 538 211
ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073

Dear Mr. Wassersug:

Pursuant to your request, ARCO Chemical Company, a division of Atlantic Richfield Company, is submitting information pertaining to the Research and Development Center's solid waste management unit, located in Newtown Square, Pennsylvania, under EPA's authority to implement Sections 3004(u) and 3008(h) of the Hazardous and Solid Waste Amendments of 1984. Please note, for ease of compiling the necessary information, we have formatted our response (Attachment I) to be consistent with the outline in your April, 1986 memorandum.

On August 11, 1983, we requested the Pennsylvania Department of Environmental Resources' (PaDER) Regional Solid Waste Manager and the USEPA Region III offices to terminate our application for a solid waste drum storage permit and change the records to indicate that the facility would have a "generator only" status. On September 20, 1983, the PaDER notified us that they had determined we were not a TSD facility; and, therefore, interim status was terminated. It is our understanding that we are not required to obtain a RCRA permit; and, thus, Section 3004(u) requirements do not apply to the facility.

Additionally, you have stated that Section 3008(h) applies to all facilities that operated under interim status. We have been advised that this section has been interpreted by the USEPA to allow the agency to take enforcement action to require corrective action or any other response necessary to protect human health or the environment when a release is identified at an interim status hazardous waste treatment, storage or disposal facility. To the best of our knowledge,

CKECKLIST FOR SWMU RESPONSES

Name of Facility ALCO Chemical Co
EPA I.D # PAD 046 538 211
Date Recieved 5/23/80

1. Is facility currently storing less than 90 days. YES ☒ NO ☐

2. Did facility claim that they filed in error YES ☐ NO ☒

3. Description/Number of SWMU's 4
Land Disposal ☐ Incinerators ☐ Tanks ☐
Land Treatment ☐ Surface Impoundments ☐ Drums ☒
Other See separate sheet (2)

4. Is there evidence of contamination YES ☐ NO ☐
Groundwater: YES ☐ NO ☐
Surface Water: YES ☐ NO ☐
Air: YES ☐ NO ☐

5. Certification YES ☐ NO ☒

6. PRIORITY

HIGH-----Reported evidence of release to air, ground or surface water.

MEDIUM---No releases reported but land based SWMUs reported.

LOW-----Everything else.

7. Comments:

ARCO Chemical Company

3801 West Chester Pike
Newtown Square, Pennsylvania 19073
Telephone 215 359 2001



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Vice President
Research & Development

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 12, 1986

Mr. Stephen R. Wassersug, Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency
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Philadelphia, Pennsylvania 19107

RECEIVED
PA SECTION

MAY 23 1986

EPA, R3

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U.S. Environmental Protection Agency

Re: 3HW33
PAD 046 538 211
ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073

Page 2

May 12, 1986

there has never been a release to the environment of hazardous waste or hazardous constituents from the facility's solid waste management unit during and after the period when we had an interim status classification.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions concerning the information submitted, please don't hesitate to contact us.

Very truly yours



J. E. Connor, Jr.

JEC/JWC/mab
attachments (2 sets)

cc with att (2 sets):

Mr. Wayne L. Lynn
Pennsylvania Department of Environmental Resources
1875 New Hope Street
Norristown, Pennsylvania 19401

[NS-EPA/PADER.1]

ATTACHMENT I

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Research and Development Center
Newtown Square, Pennsylvania
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3801 West Chester Pike
Newtown Square, Pennsylvania 19073-2387
Telephone: 610.359.2000

October 24, 2000

FedEx (8184 6846 9862)

Mr. Grant J. Dufficy
U.S. Environmental Protection Agency - Region III
RCRA Compliance and Enforcement Branch (3WC31)
1650 Arch Street
Philadelphia, PA 19103

Re: Notice of Violation ; Docket Number: R3-00-NOV-RCRA-016
Compliance Evaluation Inspection on September 8, 1999
EPA ID No. PAD046538211

Dear Mr. Dufficy:

This letter is in response to the Notice of Violation (NOV) recently issued by the U.S. Environmental Protection Agency, Region III ("EPA") as a result of the Compliance Evaluation Inspection ("CEI") conducted at our Newtown Square facility on September 8, 1999 under the Pennsylvania Solid Waste Management Act (SWMA), as amended, and the Resource Conservation and Recovery Act (RCRA).

Concerning alleged violation number 1, immediate corrective action was taken the day of the inspection to close the open mercury waste container found in the lab. Further corrective action following the inspection included the preparation of a regulatory summary packet that outlined state and federal requirements related to "Use and Management of Containers", which key managers communicated site-wide with employees shortly after the inspection in 1999. Periodic follow-up inspections were also conducted by the management team in the several months following the inspection in 1999 to verify compliance with these requirements in their individual operating areas. Similar inspections are also conducted throughout the year by employees as part of general safety and environmental practice at this site. Also on a routine basis, annual training is conducted throughout the year with all site employees to review the site's waste handling policy that incorporates and outlines key state and federal waste regulations. During training, considerable emphasis is placed on the requirement to ensure containers holding hazardous waste are closed during storage, except when it is necessary to add or remove waste.

Concerning alleged violation number 2, immediate corrective action was taken the day of the inspection to close the 55 gallon container in E Bay 1. Again, as mentioned in the response to alleged violation number 1, key managers communicated regulatory requirements related to "Use and Management of Containers" with their employees shortly after the inspection in 1999, and

Mr. Grant Dufficy
Notice of Violation; Docket Number: R3-00-NOV-RCRA-016
EPA ID No. PAD046538211
October 24, 2000
Page 2

the management team conducted periodic follow-up inspections of their operating areas to ensure the requirements were being satisfied. All regulatory issues are also summarized and reinforced with site employees during annual training of the site's waste handling policy and RCRA refresher. It should be noted, however, that the E Bay 1 container in question was open because the operator was in the process of draining polyol from a pail liner into the container. Polyol is a naturally viscous material and takes a longer time to pour than a typical liquid waste material.

As for the EPA's observation that there were hairline cracks found in the concrete base of the hazardous waste storage areas (i.e., Main Drum Storage Pad and the small E Pad), we established a project team immediately following the inspection in 1999 to evaluate appropriate corrective action. The project team recommended the application of a polyurea coating to the pads to seal the cracks and provide a long term impervious base for our hazardous waste storage areas. The coating material was determined to be the most compatible with the types of wastes being stored on the pads. We selected a reputable vendor to perform the work, and they began surface prep work on November 3, 1999. The polyurea coating was applied starting November 8, 1999 and was finished by November 12, 1999. Our plans for repairing the cracks were communicated to the Pennsylvania Department of Environmental Protection (PA DEP) in October and November 1999, and EPA's CEI inspector, George Houghton, was copied on the letters communicating the repair plans. Mr. Ben Williams with the PA DEP performed a follow-up inspection on March 10, 2000 and confirmed the state's satisfaction with the repair work.

Please note that in the EPA's inspection report, the telephone number for the site regulatory contact should be 610-359-4849, not 610-359-4604. This phone number had been revised on a subsequent Notification of Hazardous Waste Activity (EPA 8700-12) form submitted to EPA the day before the inspection. Also, the company name on the inspection report should be Lyondell Chemical Worldwide, Inc., not Lyondell Worldwide, Inc. In any case, effective December 31, 1999, Lyondell Chemical Worldwide, Inc. merged into Lyondell Chemical Company.

If you have any questions about this response, please call me at (610) 359-4849.

Sincerely,

A handwritten signature in cursive script that reads "Thomas P. Baker". The signature is written in dark ink and is positioned above the printed name and title.

Thomas P. Baker
Environmental Superintendent

Mr. Grant Dufficy

Notice of Violation; Docket Number: R3-00-NOV-RCRA-016

EPA ID No. PAD046538211

October 24, 2000

Page 3

cc: Ramesh Rameswaran - NTO D1
Dave Prilutski - NTO B2
Steven Cook - OHC
HS&E Central File (10.83711.1999)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Thomas Baker
Environmental Superintendent
Lyondell Worldwide Inc.
3801 Westchester Pike
Newtown Square, PA 19073

Re: Notice of Violation
Compliance Evaluation Inspection
September 8, 1999
EPA ID No. PAD046538211

Docket Number: R3-00-NOV-RCRA-016

Dear Mr. Baker:

On September 8, 1999, the U.S. Environmental Protection Agency, Region III ("EPA") conducted a Compliance Evaluation Inspection ("CEI") under the Pennsylvania Solid Waste Management Act (SWMA), as amended, 35 P.S. §§6018.101 - 6018.1003, and the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. Sections 6901 et seq. Based on that inspection and/or review of other pertinent information, EPA has determined that Lyondell Worldwide Inc. (Lyondell or the facility) is violating regulations promulgated under the Pennsylvania SWMA and RCRA. As a result of this finding, the Agency is issuing this **Notice of Violation (NOV)**. The specific violation(s) are:

1. During the inspection one open container of mercury was observed in a laboratory (room D2151). This open container was in violation of State and Federal regulations at 25 PA §75.264(q)(3) [now 25 PA §265.173] [40 CFR §265.173(a)]. Therefore this container did not qualify for the exemption from permitting requirements set forth in 25 PA §75.262(g) [now 25 PA §262.34]. The comparable federal regulations is at 40 CFR §262.34. This container was stored without a permit or interim status in violation of RCRA Section 3005, 42 U.S.C. §6925, and 25 Pa. Code Section 75.270(a) (40 C.F.R. § 270.1).

CONCURRENCES							
SYMBOL	3wc31	3wc31	3wc31				
SURNAME	G. Dufficy	K. [signature]	D. Lot [signature]				
DATE	9/24/00	9/29/00	9/29/00				

2. During the inspection one 55 gallon container in E Bay 1 was open at the top. This open container was in violation of State and Federal regulations at 25 PA §75.264(q)(3) [now 25 PA §265.173] [40 CFR §265.173(a)]. Therefore this container did not qualify for the exemption from permitting requirements set forth in 25 PA §75.262(g) [now 25 PA §262.34]. The comparable federal regulations is at 40 CFR §262.34. This container was stored without a permit or interim status in violation of RCRA Section 3005, 42 U.S.C. §6925, and 25 Pa. Code Section 75.270(a) (40 C.F.R. § 270.1).

Additionally, PA Title 25 § 265.174 requires that a facility's container storage areas shall have a containment system capable of collecting and holding spills, leaks and precipitation. At the time of the inspection the EPA inspector observed that the facility's hazardous waste containment area (both the small pad and main storage) showing cracks in the berm and floor. This is a violation of current Pennsylvania generator requirements. It is recommended that you correct the deficiency, and then inform PADEP of the correction.

A copy of the Inspection Report, documenting the findings of the inspector, is enclosed for your information.

Within twenty (20) calendar days of the receipt of this NOV, please submit documentation of any measures North Penn has taken or is taking to achieve compliance with the violation(s) and/or area(s) of concern noted above, or provide an explanation of facts and circumstances that cause you to believe that EPA's determination of the alleged violations are in error. If the compliance measures identified are planned or are on-going, please provide a schedule for when the compliance measures will be completed. Section 3008(a) of RCRA authorizes EPA to take an enforcement action whenever it is determined that any person has violated, or is in violation, of any requirement of RCRA as amended. Such an action could include a penalty of up to \$27,500 per day of violation. In addition, failure to achieve and maintain compliance with the regulations cited in this NOV may be treated as a repeated offense and may constitute a "knowing" violation of Federal law.

CONCURRENCES							
SYMBOL	3wc31	3wc31	3wc31				
SURNAME	G. Dufficy	K. Cox	D. Lott				
DATE							

This NOV is not intended to address all past violations, nor does it preclude EPA from including any ongoing, including the ones cited in this letter, or past violations in any future enforcement action. The response to this NOV shall be addressed to:

Grant J. Dufficy
U.S. Environmental Protection Agency - Region III
RCRA Compliance and Enforcement Branch (3WC31)
1650 Arch Street
Philadelphia, Pennsylvania 19103

James N. Webb
Associate Director
Office of Enforcement
Waste and Chemicals Management Division

Date

Enclosure

cc: Rick Shipman, PADEP
Grant Dufficy (3WC31)

CONCURRENCES							
SYMBOL	▶ 3wc31	3wc31	3wc31				
SURNAME	▶ G. Dufficy	K. Cox	D. Lott				
DATE	▶						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Notice of Violation
Lyondell Worldwide Inc.
Newtown Square, PA 19073

September
29, 2000

FROM: Grant Dufficy, Environmental Engineer *GD 9/29/00*
RCRA Compliance and Enforcement Branch (3WC31) *Thru 2565 9/29/00*

TO: James N. Webb, Associate Director for Enforcement
Waste & Chemicals Management Division (3WC30)

I recommend that you sign the attached Notice of Violation which addresses violations of the Pennsylvania Solid Waste Management Act (SWMA), as amended, 35 P.S. §§6018.101 - 6018.1003, and the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. Sections 6901 et seq. by Lyondell Worldwide of Newtown Square, PA.

A. Respondent

Lyondell Worldwide Inc.
Newtown Square, PA 19073

B. Type of Action

The recommended action is an administrative proceeding for issuance of a Notice of Violation for violations described below.

C. Summary of the Case

Two containers of Hazardous Waste were opened at the time of the inspection. Storage area containment (both the small pad and main storage) showed cracks in the berm and floor (a violation of PA generator regs. Only).

D. State or City Involvement

The State was notified prior to the tier meeting and concurred.

E. Respondent's RCRA History

The facility's compliance history over the last 5 years is clear except for the State citing them for a manifest violation in 1998.

F. EPA Policy Impact

This action is consistent with EPA policy.

G. Public and Congressional Relations

No special or congressional concern is expected in response to this action.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

SEP 29 2000

Thomas Baker
Environmental Superintendent
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3801 Westchester Pike
Newtown Square, PA 19073

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September 8, 1999
EPA ID No. PAD046538211

Docket Number: R3-00-NOV-RCRA-016

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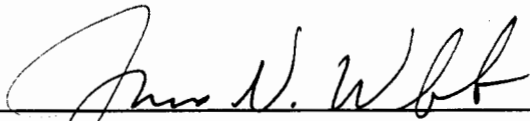
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Philadelphia, Pennsylvania 19103



James N. Webb
Associate Director
Office of Enforcement
Waste and Chemicals Management Division

09.29.00

Date

Enclosure

cc: Rick Shipman, PADEP
Grant Dufficy (3WC31)

RCRA Compliance Evaluation Inspection

LYONDELL Worldwide Inc.

3801 Westchester Pike
Newtown Square, Pennsylvania 19073

Formerly known as:

ARCO Chemical Company

Telephone Number: 610-359-4604

Date of Inspection: September 8, 1999

RCRA Identification Number: PAD046538211

SIC number: 2869

EPA Representative:

George H. Houghton
Environmental Protection
Specialist

State Representative:

Benjamin L. Williams
Solid Waste Specialist

Facility Representative:

Thomas Baker
Environmental superintendent

Robert Masine
Pilot Plant Superintendent

Howard Miller

BACKGROUND

At the request of the Chemical and Waste Management Division, the Facility Inspection Program inspected Lyondell, a research and development activity, located in Newtown Square, Pennsylvania.

FACILITY DESCRIPTION

ARCO Chemical Company was a subsidiary of ARCO, the petroleum company, but formed its own independent company in the 1980s. In July 1998, ARCO Chemical Company merged with Lyondell whose headquarters is in Houston Texas. Headquarters staff, left over from ARCO are currently being transferred to Houston. This facility performs research and development on organic chemicals, principally propylene oxide including polyol and derivatives. The research progresses from laboratory experiments to small bench scale experiments to a pilot plant. Within this facility are over 100 analytical laboratories. The site covers about 10 acres. Current employment is about 400.

A portion of the property and one building was sold to SAP America. Reportedly, this company designs software. Their hazardous waste activities, if any, are independent of Lyondell and were not investigated as part of this inspection.

PERMIT STATUS

Lyondell is a large quantity generator storing for less than 90 days in containers. The facility does not have a RCRA Part B permit.

INSPECTION OBSERVATIONS

General

Lyondell has two storage pads for containers of hazardous waste, one is located near the Pilot Plant while the other is

called the 'large pad' or 'main pad'. Each lab that generates waste manages their waste using the satellite accumulation option. It is facility policy to label all waste as a hazardous waste until a final determination is made by the waste handlers. The waste is first transported to the 'pouring room' where this determination is made. The hazardous waste determination is made using the knowledge from the laboratory generator, ingredients are listed on the container, original container information, MSDS or a combination of these. Additionally, the TSD facility will periodically accomplish a waste analysis as part of the waste profile. Typically, all waste, whether hazardous or not, is disposed in the same manner, incineration. Waste from the labs is picked up on Monday, Wednesday and Fridays. The lab operator places their waste in pans located in the service corridor between the labs (see photo). Lab waste is packed in lab packs and shipped out monthly. The disposal contractor for the lab pack and drum quantity waste is AETS who was recently "bought out" by ONYX. Safety Kleen, used by the facility's maintenance department, disposes the waste from part cleaning. Bulk waste is managed by Clean Harbors.

Satellite

The inspector observed 10 of the labs for compliance with the regulations. In one laboratory (room D2151) a container was observed that was labeled mercury (see photo). It was open at the top with a funnel placed in the opening and held an estimated 10 to 20 ML of waste mercury (see photo). The waste stored in the remaining laboratories appeared to be correctly managed.

In addition to the laboratories, waste is generated at the pilot plant also known as E-Bay 1. One 55 gallon container labeled acetone wash was observed (see photo). This container was open at the large bung hole with a funnel in it. Laying inside the funnel was a pail liner that was placed there for

draining. The inspector observed that this liner was dry. The small bung hole was also open. The container was adequately labeled. Another 55 gallon container was labeled a hazardous waste but the contents labeling was confusing. It was labeled as acetone, IPA (isopropyl alcohol), VAZO (cas #13472-08-7) to be decomposed and hazardous waste. According to this building's representative, Tom Mcaleer, the drum contained an IPA and water mixture.

Less than 90 day storage

One of the storage areas is termed the "small pad" by facility personnel for waste that originates from the pilot plant. It is also known as the 'E-pad'. Waste accumulated in this area originates from the pilot plant (E-Bay). The waste is removed daily to the main less than 90 day storage area. Inspections are weekly and documented. A sump is available to capture spills and rain water. According to the facility, the sump water is either discharged to DELCORA, if found to be contaminated, or to the surface waters if not contaminated. Containers in this area were properly managed. The floor of the containment area was found to have hair line cracks.

The main storage pad is equipped with a berm for spill containment and a canopy for weather protection. The bermed area leads to a sump whose valve is normally closed. Accumulated water is discharged to the facility's WWTP. If the liquid in the sump resulted from a spill or is otherwise contaminated, it is tested and handled accordingly. A spill pan (see photo) is used to stage smaller quantity incoming waste before placement in hazardous material storage cabinets. These containers were first sorted at the pouring room. Eventually this waste will be packed for shipment as lab-packs. This inspector observed that two one gallon containers were not dated, otherwise, all the observed containers appeared to be properly stored. All the drums observed also appeared to be properly stored, although, some of the labels were obscured by

other drums. Inspections were adequate and are documented weekly. Some cracks were noted in the floor of the storage area (see photo).

Subsequent to this inspection, Mr. Baker informed this inspector that a coating would be applied to both the main pad and the E-pad floor to seal the cracks (letter attached).

Pouring area

Waste from the laboratories is brought to this area and its hazardous classification is determined as mentioned earlier. Some of the waste is transferred to the main storage area for lab packing. Like wastes, that can be bulked, are poured into larger containers, usually 55 gallon drums, for ease of shipment. The one drum of bulked waste, observed by this inspector, was closed and dated. During the pouring operation a suction air vent is used to minimize the workers exposure of vapors. This vent discharges directly to the atmosphere and, according to the facility representative, has no air pollution control equipment.

Subpart cc

According to Mr. Baker, the facility has evaluated its waste through knowledge of the waste streams. Their method of complying with the cc regulations is to place all waste in DOT approved containers while the waste is stored in the <90 day storage site.



3801 West Chester Pike
Newtown Square, Pennsylvania 19073-2387
Telephone: 610.359.2000

March 22, 2000

CERTIFIED MAIL (Z 533 684 328)

Mr. Benjamin L. Williams
Pennsylvania Department of Environmental Protection
Southeast Regional Office
Waste Management Program
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428-2233

Re: **Multiple EPA Identification Numbers at Atlantic Richfield Company Site
3801 West Chester Pike, Newtown Square, PA 19073
Lyondell Chemical Company (EPA ID No. PAD046538211)**

Dear Mr. Williams:

We are notifying you that Lyondell Chemical Company ("Lyondell") is selling its Polyols Business, pending final approvals, to Bayer Corporation ("Bayer") effective approximately April 1, 2000. As a result of this sale, Bayer will own Lyondell's polyol technology operations at the Research and Development (R&D) Facility located in Newtown Square, PA. Although the site is currently owned by Atlantic Richfield Company, it will be leased by both Lyondell and Bayer, and each company individually will be a large quantity generator of hazardous waste. Please note that, with regard to Lyondell, this notification is for informational purposes only, and does not require accompanying submittal of a revised EPA Form 8700-12. However, as Bayer is a distinct entity (or "person" per the definition of generator at 40 CFR 260.10 and incorporated by reference in 25 Pa. Code 260a.10), we understand that Bayer will require its own EPA Identification Number (EPA ID#). We understand this to be the case notwithstanding the fact that two EPA ID#s will subsequently be assigned to the single subject site. Bayer is in the process of obtaining its own EPA ID# from EPA Region III and plans to have it in place on the effective date of the sale. As a result, as of April 1, 2000 two EPA ID#s will be in place for the subject site.

We are also notifying you that, as part of the expected lease arrangements and general services agreement between Lyondell and Bayer, there will be portions of the site shared by both companies and services potentially provided by Lyondell for Bayer. With regard to hazardous waste, Lyondell and Bayer will share the on-site less than ninety day accumulation area with each company's waste being clearly identified. Lyondell, as host, will provide shared services to Bayer which are expected to include collection of Bayer generated waste, movement of Bayer generated

Mr. Benjamin L. Williams
PAD046538211
March 22, 2000
Page 2

hazardous waste to the less than ninety day accumulation area, and arrangement of off-site treatment, storage and disposal of Bayer generated waste. We understand that this arrangement, which is strictly for efficiency purposes, will not elevate either Lyondell or Bayer from generators to owners or operators of hazardous waste treatment, storage and disposal facilities. Accordingly, Lyondell and Bayer will conduct their hazardous waste operations in accordance with 40 CFR 262 and 25 Pa. Code 262a without the need for any hazardous waste permit.

Finally, each company will be responsible for complying with Federal and Pennsylvania hazardous waste regulations (in addition to all other regulations) applicable to their individual operations. As the operations transition, and where appropriate when the transition is complete, Lyondell and Bayer will jointly operate under existing preparedness, prevention and contingency plans, source reduction strategies, etc. that are presently in place for the site.

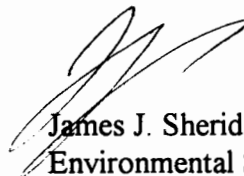
If you have any questions, please call me at (610) 359-4849.

Sincerely,



Thomas P. Baker
Environmental Superintendent
Lyondell Chemical Company

Endorsed By:



James J. Sheridan
Environmental Specialist
Bayer Corporation

cc: Mr. Grant Dufficy
U.S. Environmental Protection Agency, Region III
RCRA Programs Branch (3WC31)
1650 Arch St.
Philadelphia, PA 19103-2029

Ms. Jennifer Collins
U.S. Environmental Protection Agency, Region III
RCRA Programs Branch
Pennsylvania Section (3WC11)
1650 Arch St.
Philadelphia, PA 19103-2029

HS&E Central File

March 21, 2000

Bayer Corporation
100 Bayer Road
Pittsburgh, PA 15205-9741
Phone: 412 777-2000

Ms. Jennifer Collins
U.S. Environmental Protection Agency, Region III
RCRA Programs Branch
Pennsylvania Section (3WC11)
1650 Arch Street
Philadelphia, PA 19103

RECEIVED

APR - 4 2000

RCRA Compliance &
Enforcement Branch (3WC31)

RE: Initial Notification of Regulated Waste Activity
Bayer Corporation - Newtown Square, PA

Dear Ms. Collins:

In accord with 40 CFR 262.12 and 25 Pa. Code 262a.12, attached please find an initial Notification of Regulated Waste Activity (EPA 8700-12) form and Pennsylvania's Supplement to U.S. EPA Notification of Hazardous Waste Activity Form for the hazardous waste activities at Bayer Corporation's Newtown Square, PA installation.

As we discussed by phone on March 21, 2000, Bayer Corporation ("Bayer") is purchasing, pending final approvals, Lyondell Chemical Company's ("Lyondell's") Polyols Business effective approximately April 1, 2000. As a result of this sale, Bayer will own Lyondell's polyol technology operations at the research and development (R&D) facility located in Newtown Square, PA. Although the site is currently owned by Atlantic Richfield Company, it will be leased by both Bayer and Lyondell, and each company individually will be a large quantity generator of hazardous waste. As Bayer is a distinct entity (or "person" per the definition of generator at 40 CFR 260.10 and incorporated by reference in 25 Pa. Code), I understand that Bayer will require its own EPA Identification Number (EPA ID#). I understand this to be the case notwithstanding the fact that two EPA ID#s will subsequently be assigned to the single subject site. In accordance with our discussion, Bayer's initial notification distinguishes Bayer from Lyondell (EPA ID# PAD046538211) by use of a building qualifier within the description of the location of installation.

As we further discussed, as part of the expected lease arrangements and general services agreement between Bayer and Lyondell, there will be portions of the site shared by both companies and services potentially provided for Bayer by Lyondell. With regard to hazardous waste, Bayer and Lyondell will share the on-site less than ninety day accumulation area with each company's waste being clearly identified. Lyondell, as host,

will provide shared services to Bayer which are expected to include collection of Bayer generated waste, movement of Bayer generated hazardous waste to the less than ninety day accumulation area, and arrangement of off-site treatment, storage, and disposal of Bayer generated waste. I understand that this arrangement, which is strictly for efficiency purposes, will not elevate either Bayer or Lyondell from generators to owners or operators of hazardous waste treatment, storage and disposal facilities. Accordingly, Bayer and Lyondell will conduct their hazardous waste operations in accord with 40 CFR 262 and 25 Pa. Code 262a without the need for any hazardous waste permit.

Finally, as we discussed, each company will be responsible for complying with Federal and Pennsylvania hazardous waste regulations (in addition to all other regulations) applicable to their individual operations. As the operations transition, and where appropriate when the transition is complete, Bayer and Lyondell will jointly operate under existing preparedness, prevention, and contingency plans, source reduction strategies, etc. that are presently in place for the site.

In accord with my understandings noted above, I am submitting the enclosed EPA 8700-12 form for assignment to Bayer of an EPA ID#. I have identified Bayer's hazardous waste activities as solely large quantity generation, have listed all of the waste codes Bayer expects to generate, and will be initiating the adoption of all necessary plans to Bayer's hazardous waste operations.

If you have any questions, please call me at (412) 777-2222.

Sincerely,



James J. Sheridan, Jr.
Environmental Specialist
Bayer Corporation

cc: Thomas P. Baker, Lyondell Chemical Company
Grant Dufficy, U.S. Environmental Protection Agency, Region III
Robert Finkle, Pennsylvania Department of Environmental Protection
Benjamin L. Williams, Pennsylvania Department of Environmental Protection
Klaus H. Sommer, Bayer Corporation
Anne H. Lewis, Bayer Corporation

Please refer to Section V, Line-by-Line Instructions for Completing EPA Form 8700-12 before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).	<h2 style="margin: 0;">Notification of Regulated Waste Activity</h2> United States Environmental Protection Agency	Date Received (For Official Use Only)
I. Installation's EPA ID Number (Mark 'X' in the appropriate box)		
<input checked="" type="checkbox"/> A. Initial Notification	<input type="checkbox"/> B. Subsequent Notification (Complete item C)	C. Installation's EPA ID Number
II. Name of Installation (Include company and specific site name)		
B A Y E R C O R P O R A T I O N		
III. Location of Installation (Physical address not P.O. Box or Route Number)		
Street		
3 8 0 1 W E S T C H E S T E R P I K E		
Street (Continued)		
E B U I L D I N G		
City or Town		State
N E W T O W N S Q U A R E		P A
County Code		Zip Code
0 4 5 D E L A W A R E		1 9 0 7 3 - 2 3 8 7
IV. Installation Mailing Address (See Instructions)		
Street or P.O. Box		
3 8 0 1 W E S T C H E S T E R P I K E		
City or Town		State
N E W T O W N S Q U A R E		P A
County Code		Zip Code
0 4 5 D E L A W A R E		1 9 0 7 3 - 2 3 8 7
V. Installation Contact (Person to be contacted regarding waste activities at site)		
Name (Last)		(First)
S H E R I D A N		J A M E S
Job Title		Phone Number (Area Code and Number)
E N V . S P E C I A L I S T		4 1 2 - 7 7 7 - 2 2 2 2
VI. Installation Contact Address (See Instructions)		
A. Contact Address Location	B. Street or P.O. Box	
<input type="checkbox"/>	1 0 0 B A Y E R R O A D	
City or Town		State
P I T T S B U R G H		P A
County Code		Zip Code
1 5 2 0 5 - 9 7 4 1		
VII. Ownership (See Instructions)		
A. Name of Installation's Legal Owner		
A T L A N T I C R I C H F I E L D C O M P A N Y		
Street, P.O. Box, or Route Number		
5 1 5 S O U T H F L O W E R S T R E E T		
City or Town		State
L O S A N G E L E S		C A
County Code		Zip Code
9 0 0 7 1 -		
Phone Number (Area Code and Number)	B. Land Type	C. Owner Type
2 1 3 - 4 8 6 - 3 5 1 1	P	P
D. Change of Owner Indicator		Date Changed
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Month <input type="checkbox"/> Day <input type="checkbox"/> Year <input type="checkbox"/>

ID - For Official Use Only

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to Instructions)

A. Hazardous Waste Activities

1. Generator (See Instructions)
☒ a. Greater than 1000kg/mo (2,200 lbs.)
☐ b. 100 to 1000 kg/mo (220-2,200 lbs.)
☐ c. Less than 100 kg/mo (220 lbs.)
2. Transporter (Indicate Mode in boxes 1-5 below)
☐ a. For own waste only
☐ b. For commercial purposes
- Mode of Transportation
☐ 1. Air
☐ 2. Rail
☐ 3. Highway
☐ 4. Water
☐ 5. Other - specify _____
3. Treater, Storer, Disposer (at Installation) Note: A permit is required for this activity, see Instructions.
4. Exempt Boiler and/or Industrial Furnace
☐ a. Smelting, Melting, and Refining Furnace Exemption
☐ b. Small Quantity On-Site Burner Exemption
5. Underground Injection Control

C. Used Oil Management Activities

1. Used Oil Transporter/Transfer Facility - Indicate Type(s) of Activity(ies)
☐ a. Transporter
☐ b. Transfer Facility
2. Used Oil Processor/Re-refiner - Indicate Type(s) of Activity(ies)
☐ a. Processor
☐ b. Re-refiner
3. Off-Specification Used Oil Burner
4. Used Oil Fuel Marketer
☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Used Oil Burner
☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

B. Universal Waste Activity

- ☐ Large Quantity Handler of Universal Waste

IX. Description of Hazardous Wastes (Use additional sheets if necessary)

A. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; See instructions if you need to list more than 12 waste codes.)

1 F 0 0 1	2 F 0 0 2	3 F 0 0 3	4 F 0 0 4	5 F 0 0 5	6 F 0 2 7
7 P 0 0 3	8 P 0 0 5	9 P 0 1 1	10 P 0 1 2	11 P 0 1 4	12 P 0 2 0

B. Characteristics of Nonlisted Hazardous Wastes. (Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles; See 40 CFR Parts 261.20 - 261.24; See instructions if you need to list more than 4 toxicity characteristic waste codes.)

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic	(List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminant(s))
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 D 0 0 4
				2 D 0 0 5
				3 D 0 0 6
				4 D 0 0 7

C. Other Wastes. (State-regulated or other wastes requiring a handler to have an I.D. number; See Instructions.)

1	2	3	4	5	6

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature <i>Klaus Sommer</i>	Name and Official Title (Type or print) Klaus H. Sommer, VP Research	Date Signed 3-22-2000
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XI. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section IV of the booklet for addresses.)

ID - For Official Use Only

IX. Description of Hazardous Wastes (Continued; Additional Sheet)

A. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; Use this page only if you need to list more than 12 waste codes.)

13			
P	0	2	4
19			
P	0	6	8
25			
P	0	8	7
31			
P	1	0	8
37			
U	0	0	1
43			
U	0	2	9
49			
U	0	6	9
55			
U	1	0	3
61			
U	1	1	3
67			
U	1	3	3
73			
U	1	5	2
79			
U	1	6	5
85			
U	2	0	9
91			
U	2	2	1
14			
P	0	2	8
20			
P	0	6	9
26			
P	0	9	3
32			
P	1	1	3
38			
U	0	0	6
44			
U	0	4	1
50			
U	0	8	0
56			
U	1	0	5
62			
U	1	1	5
68			
U	1	3	4
74			
U	1	5	3
80			
U	1	6	9
86			
U	2	1	3
92			
U	2	2	2
15			
P	0	2	9
21			
P	0	7	5
27			
P	0	9	8
33			
P	1	1	9
39			
U	0	0	7
45			
U	0	4	4
51			
U	0	9	2
57			
U	1	0	6
63			
U	1	1	7
69			
U	1	3	8
75			
U	1	5	6
81			
U	1	8	8
87			
U	2	1	4
93			
U	2	2	3
16			
P	0	3	0
22			
P	0	7	6
28			
P	1	0	4
34			
P	1	2	0
40			
U	0	0	8
46			
U	0	5	2
52			
U	0	9	6
58			
U	1	0	7
64			
U	1	2	1
70			
U	1	4	4
76			
U	1	5	9
82			
U	1	9	0
88			
U	2	1	6
94			
U	2	2	8
17			
P	0	4	7
23			
P	0	7	7
29			
P	1	0	5
35			
P	1	2	1
41			
U	0	0	9
47			
U	0	5	3
53			
U	1	0	1
59			
U	1	0	8
65			
U	1	2	2
71			
U	1	4	7
77			
U	1	6	0
83			
U	1	9	4
89			
U	2	1	7
95			
U	2	3	8
18			
P	0	4	8
24			
P	0	7	8
30			
P	1	0	6
36			
P	2	0	5
42			
U	0	1	2
48			
U	0	6	8
54			
U	1	0	2
60			
U	1	1	2
66			
U	1	2	3
72			
U	1	5	1
78			
U	1	6	2
84			
U	2	0	4
90			
U	2	1	9
96			
U	2	4	6

B. Toxicity Characteristic Hazardous Wastes. (See 40 CFR 261.24; Use this page only if you need to list more than 4 waste codes.)

5			
D	0	0	8
11			
D	0	2	2
17			
6			
D	0	0	9
12			
D	0	2	9
18			
7			
D	0	1	0
13			
D	0	3	5
19			
8			
D	0	1	1
14			
D	0	3	6
20			
9			
D	0	1	9
15			
D	0	3	8
21			
10			
D	0	2	1
16			
D	0	3	9
22			

ID - For Official Use Only

IX. Description of Hazardous Wastes (Continued; Additional Sheet)**A. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33; Use this page only if you need to list more than 12 waste codes.)**

97	98	99	100	17	18
U 2 7 9	U 3 5 3	U 4 0 4			
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96

B. Toxicity Characteristic Hazardous Wastes. (See 40 CFR 261.24; Use this page only if you need to list more than 4 waste codes.)

5	6	7	8	9	10
11	12	13	14	15	16
17	18	19	20	21	22

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

SUPPLEMENT TO U.S. EPA NOTIFICATION OF HAZARDOUS WASTE ACTIVITY FORM
(EPA Form 8700-12)

I. Installation's EPA I.D. Number

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II. Name of Installation

BAYER CORPORATION

III. Location of Installation

NEWTOWN TOWNSHIP, NEWTOWN SQUARE, PA

DELAWARE

Municipality (Township, Borough, City)

County

IV. IRS Employer Identification Number

2	5	—	1	3	3	9	2	1	9
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V. SIC Codes (four-digit number in order of priority)

2	8	6	9
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Specify: R & D ACTIVITIES

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Specify:

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Specify:

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Specify:

VI. Type of Hazardous Waste Activity

- ☒ 1. Generator (1,000 kg/mo or greater)
- ☐ 2. Small Quantity Generator (greater than 100 kg/mo but less than 1,000 kg/mo)
- ☐ 3. Treatment

- ☐ 4. Storage
- ☐ 5. Disposal
- ☐ 6. Reuse, Recycle, Reclaim
- ☐ 7. Permit by Rule (PBR)

(Type of PBR; see 25 Pa. Code § 270.60)

VII. Existing Environmental Permits

A. NPDES (Discharges to Surface Water) Stormwater

*	P	A	R	2	3	0	0	7	0								
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D. PSD (Air Emissions from Proposed Sources)

*	S	M	O	P	—	2	3	—	0	0	0	5	9
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B. UIC (Underground Injection of Fluids)

N	O	T		A	P	P	L	I	C	A	B	L	E
---	---	---	--	---	---	---	---	---	---	---	---	---	---

E. Municipal Waste (As defined in Act 97)

N	O	T		A	P	P	L	I	C	A	B	L	E
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C. RCRA (Hazardous Waste)

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

F. Residual Waste

N	O	T		A	P	P	L	I	C	A	B	L	E
---	---	---	--	---	---	---	---	---	---	---	---	---	---

G. Permit by Rule

Name of POTW

DELCORA

POTW NPDES Number

2	0	2	—	D	3	0											
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H. Other Permits

*	2	3	—	0	4	0	4	4									
---	---	---	---	---	---	---	---	---	--	--	--	--	--	--	--	--	--

* Permits presently held by Lyondell Chemical Company. Bayer in process of applying/registering for its own permits.

ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073
Telephone 215 359 2013

Braun



F. J. Greek
Manager, Facility Services

September 5, 1986

Generator USEPA #PAD 046 538 211

USEPA Regional Office
Curtis Building
6th & Walnut Streets
Philadelphia, PA 19106

Attn: Regional Administrator

Subject: Waste Minimization Report in Compliance
40CFR262.41

Please find attached the Biennial Report from the ARCO Chemical Company's Newtown Square Research & Development facility describing our ongoing efforts to minimize hazardous waste generation. We regret our oversight in not providing this information as of the requested date in the directive.

Arco Chemical is seriously concerned with the impact of waste disposal on the environment and it's high attendant costs, and efforts to reduce both of these factors are at the top of our priority list.

If additional information is required, please advise.

Sincerely,

Francis J. Greek
Manager Facility Service

FJG/jlb

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985

GENERATOR'S NAME:

Date rec'd:	Rec'd by:
-------------	-----------

XV. GENERATOR'S EPA I.D. NO.

T A C

5	P	A	D	0	4	6	5	3	8	2	1	1	1
1	2										13	14	15

XVI. WASTE MINIMIZATION (narrative description)

1. Peroxide treatment of sulfur bearing caustic scrubbing waste residuals are biologically treated off-site. This has reduced material formerly solidified and landfilled by 1.9 tons.
2. In 1985, approximately 46000 gallons of mixed, combined hydrocarbon solvents were disposed of by fuel recycling in kiln operations. While this amount is essentially the same as 1984, our efforts to improve the efficiency of separating solvents from polymer syrups continue, so as to reduce that quantity which is essentially solidified and landfilled. Incineration of polymer syrups and solids is being investigated and hopefully will soon be acceptable at disposal sites. High BTU value of the polymeric materials is the problem.

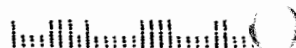
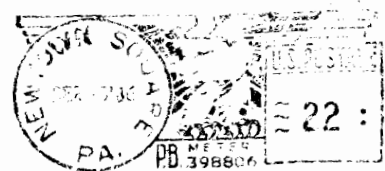
This is a continuing effort.
3. Approximately 1800 Lab Packs of miscellaneous chemicals were disposed of by incineration, representing a 55% increase over 1984 by this method versus landfill.

This is a continuing effort.

ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073



USEPA Regional Office
Curtis Building
6th & Walnut Streets
Philadelphia, PA 19106



Mr. Stephen R. Wassersug, Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency

Re: 3HW33
PAD 046 538 211
ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073

Page 2

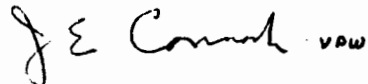
May 12, 1986

there has never been a release to the environment of hazardous waste or hazardous constituents from the facility's solid waste management unit during and after the period when we had an interim status classification.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions concerning the information submitted, please don't hesitate to contact us.

Very truly yours

A handwritten signature in dark ink, appearing to read "J E Connor" followed by a small mark that looks like "vw".

J. E. Connor, Jr.

JEC/JWC/mab
attachments (2 sets)

cc with att (2 sets):

Mr. Wayne L. Lynn
Pennsylvania Department of Environmental Resources
1875 New Hope Street
Norristown, Pennsylvania 19401

[NS-EPA/PADER.1]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In Reply Refer To: 3HW33

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. J. E. Connor, Jr., Vice President
Research & Development
Arco Chemical Co.
3801 West Chester Pike
Newtown Square, PA 19073

Re: PAD 046538211

Dear Mr. Connor:

Sections 3004(u) and 3008(h) of the Hazardous and Solid Waste Amendments of 1984 (RCRA Reauthorization) give EPA the authority to require corrective action for all releases of hazardous wastes or constituents from any solid waste management unit ("SWMU") as defined on the enclosed sheet. This requirement applies to operating units, inactive units, as well as those that are closing or have been closed in the past.

EPA and the State must first determine the location of all SWMUs at your facility. Next, we must determine whether or not any "releases" (see definitions) originated at these units. In order to enable us to make these determinations, you must provide the following information:

- (1) A topographic map showing the facility and a distance of 1,000 feet around it, at a scale of one-inch equal to not more than 200 feet. In addition to showing the location of the hazardous waste management facilities for which you are seeking a permit, it must locate all existing and former SWMUs at your facility.
- (2) For each SWMU, provide a description of the unit's functions, material of construction, dimensions, capacity, ancillary systems (piping), etc. If available, provide engineering drawings of the units and their foundations. For closed facilities, also provide

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

a copy of the closure plans, a description of how closure was performed and any relevant post-closure information you have available.

- (3) For each SWMU, provide a description of all solid wastes including hazardous wastes and hazardous waste constituents received by the units. Also, provide information on quantities of hazardous wastes and hazardous waste constituents received by each SWMU and the dates during which these units operated.
- (4) For each solid waste, SWMU, describe any releases (or possible releases) originating at the unit. This should include information on the date of release, type of solid waste, hazardous waste or hazardous waste constituents released, quantity released, nature of the release, extent of migration, and cause of release, for example, an overflow, broken pipe, tank leak, etc. Also, provide any available data which would quantify the nature and extent of environmental contamination including the results of soil, surface water and/or ground water sampling and analysis efforts. Likewise, any monitoring information that indicates releases are not present should also be submitted.

Please be advised that § 3004(u) applies to those treatment/storage/disposal facilities required to obtain RCRA permits. If you are not required to obtain a RCRA permit, please indicate that fact in your response.

Additionally, § 3008(h) applies to all facilities that operated under interim status. In some cases, this provision will not apply to a facility because it never actually operated under interim status; for example, a storage facility that filed for interim status, but never stored for more than 90 days. If you determine that this provision does not apply to your facility, you must list specific reasons that support the fact that you never operated under interim status.

If some or all of the above requested information has been previously submitted to this office, please reference this information in your reply.

We request under Section 3007 of the Act, 42 U.S.C. § 6927, that you submit two copies of the above requested information within forty-five (45) days of your receipt of this letter to both EPA and the Pennsylvania Department of Environmental Resources (PA DER).

All information you submit should be certified as required by regulation 40 C.F.R. 270.11(d). Should you have any questions concerning this letter, please contact Samuel Israel at (215) 597-9809.

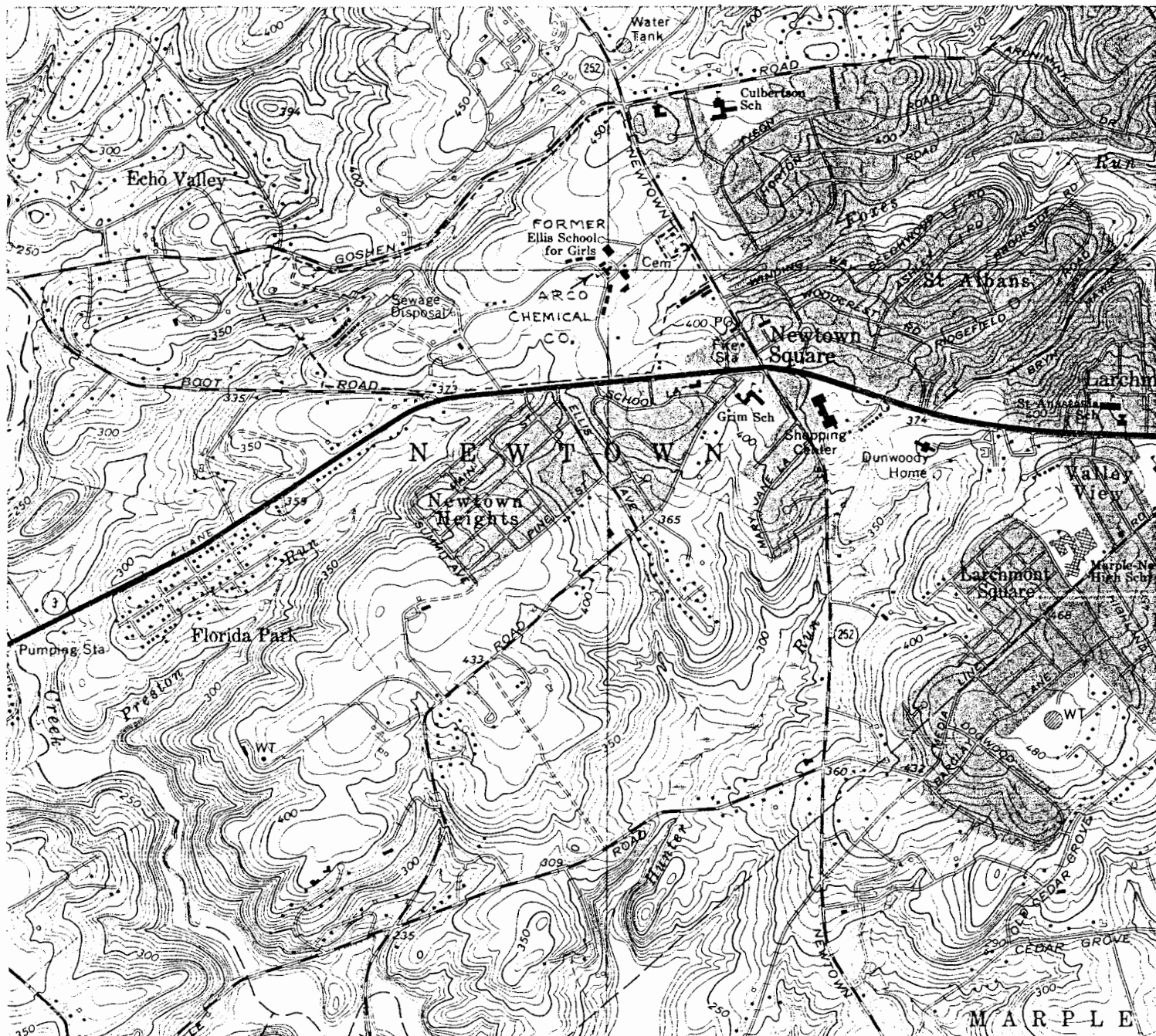
Sincerely,

Stephen R. Wassersug, Director
Hazardous Waste Management Division

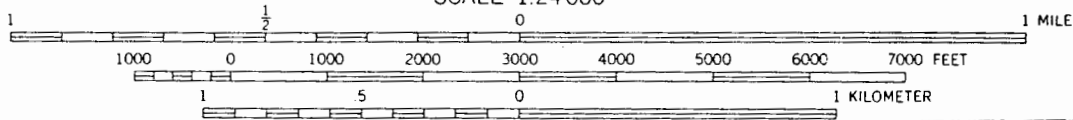
Enclosure

cc: Mr. Francis Greek
Manager of Personnel & Site

Mr. Wayne L. Lynn
Regional Solid Waste Manager
1875 New Hope Street
Norristown, PA 19401



75° 24' 31"
SCALE 1:24 000



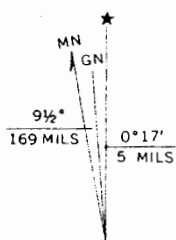
CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

MEDIA QUADRANGLE
PENNSYLVANIA

7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 CHESTER 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey

LOCATION MAP



UTM GRID AND 1966 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

ARCO Chemical Company
Division of Atlantic Richfield Company
RESEARCH & ENGINEERING
3801 WEST CHESTER PK, NEWTOWN SQ, PA. 19073



999 WEST VALLEY ROAD
WAYNE, PENNSYLVANIA 19087
215-687-9510

May 1, 1990
R-585-1-0-27
68-01-7346

Mr. Gregory Ham
U.S. Environmental Protection Agency
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, Pennsylvania 19107

Subject: Peer Review Comments
TDD No. F3-8910-26
EPA No. PA-2600
Arco Chemical Company
Newtown Square, Pennsylvania

Dear Mr. Ham:

Submitted herewith are responses to peer review comments for the subject site. Typographical errors have been corrected, and grammatical changes have been made where appropriate.

In response to comments by Lynnette Elser, as discussed during a telephone conversation on May 1, 1990, the following is offered:

1. In sections 1.3 and 3.1, stream miles have been used.
2. In sections 2.5 and 4.1.2, names have been given with waste codes.
3. The text has been changed to state that the Chester Water Authority's sources are all outside the study area.
4. The Hazard Ranking System (HRS) has been recalculated as requested. This correction does not affect the surface water or final scores. The Geist Reservoir intake is 5.7 stream miles from the site.
5. The fact that there are no home wells has been added, as requested.

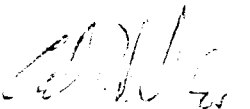
6. Section 3.1 has been changed to state that the Geist Reservoir intake and not the reservoir is located 5.7 stream miles from the site. The head of the reservoir is approximately two air miles south of the site or 4.25 stream miles downstream. The HRS surface water target information has been changed to reflect the fact that there are no drinking water intakes within three stream miles downstream of the site.

In response to RCRA comments, the following is offered:

7. In section 4.0, the chemical name has been corrected.

If you have any further questions, please contact me.

Respectfully submitted,



Gregory DeCowsky
Project Manager

Reviewed by,



Carl Rodzewich
Section Supervisor

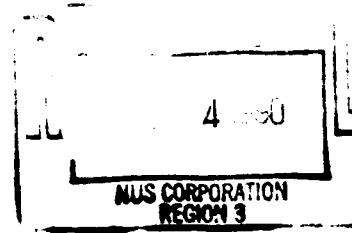
Approved by,



Garth Glenn
Regional Manager, FIT 3

GD/rob

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, PA 19107



SUBJECT: Request For Assistance from FIT Office

Date: 2 Apr 90

From: Lynnette Anne Elser, SIO
Pre-Remedial Section (3HW13)

TDD# FB-8910-24

To: Gregory Ham, Acting FIT Regional Project Officer
Pre-Remedial Section (3HW13)

I. SITE NAME: 12100 (PA-2600)
DSN

EPA ID NO. PAID 046535211

II. LOCATION: Delaware
PA

III. WORK ASSIGNMENT:

<input type="checkbox"/> Preliminary Assessment	<input type="checkbox"/> Toxicology
<input type="checkbox"/> EPI PA	<input type="checkbox"/> Recon
<input type="checkbox"/> Screening Site Inspection	<input type="checkbox"/> Re-Sampling/Full Field Investigation
<input type="checkbox"/> Listing Site Inspection	<input checked="" type="checkbox"/> Peer Review Corrections/Finalize
<input type="checkbox"/> Hazard Ranking System	<input type="checkbox"/> Other (See VI below)

IV. PRIORITY

☐ High(*) ☒ Medium ☐ Low

V. PREFERRED DEADLINE:

Date: _____

VI. EXPLANATION OF TASK (* To include justification for high priority):

*Please finalize addressing the attached
to RCKA comments.*

If there are any questions or disagreements concerning the above comments, please call the SIO listed above at 597-8333 prior to finalizing the report.

VII. To be completed by FIT RPO only:

Task complete date by FIT 5/15/90

Hours allocated _____

Gregory Ham
RPO Concurrence

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, PA 19107

SUBJECT: EPIPA Arco Chemical Company
PA-2600

Date: February 2, 1990

From: Lynnette Elser, SIO

To: Subject File

I have read the subject EPIPA & recommend the following:

- 1 Section 1.3, paragraph 2 & section 3.1
Please use stream miles.
- 2 Section 2.5 & Section 4.1.2
Please identify wastes by their code # and common name.
- 3 Section 3.1, paragraph 3
Please identify any sources of water that Chester Water Authority uses within the study area or state that no sources of water that are used by CWA are within the study area. (The report only addresses CWA's main source of water.)
- 4 HRS - Surface water
Population served was circled as 20 but that figure was not carried over and counted in the total targets score. Also, verify that Geist Reservoir is within three stream miles. See comments 6.
- 5 Section 3.1
Please state that there are no homewells in the study area or state how many homewells there are in the study area.
- 6 Section 3.5, 3.2, 3.1 and cover letter
Geist Reservoir is given as 2 miles S, 5.7 stream miles & 2.6 S/SE of the site. Please clarify, possibly the lacustrine littoral wetland that is mentioned in section 3.7 is also Geist Reservoir. It is stated as 4.25 stream miles S of the site. If Geist Reservoir is outside the study area when measured in stream miles, please change the HRS surface water targets.

If you have any questions, please call me at (215) 597-8333

ARCO CHEMICAL COMPANY
PA-2600

Comments:

1. Section 4 Waste types and quantities, page 4-1

The description of all the waste codes should be included. Also, the description for U105 should be methyl-2-1 dinitrobenzene.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, PA 19107

SUBJECT: Request For Assistance from FIT Office

Date: 2 Apr 9

From: Lynnette Anne Elser, SIO
Pre-Remedial Section (3HW13)

TDD# FB-8916

To: Gregory Ham, Acting FIT Regional Project Officer
Pre-Remedial Section (3HW13)

I. SITE NAME: ALCO Chem (PA-260)
DSN

EPA ID NO. PAID 046538211

II. LOCATION: Delaware
PA

III. WORK ASSIGNMENT:

<input type="checkbox"/> Preliminary Assessment	<input type="checkbox"/> Toxicology
<input type="checkbox"/> EPI PA	<input type="checkbox"/> Recon
<input type="checkbox"/> Screening Site Inspection	<input type="checkbox"/> Re-Sampling/Full Field Investigation
<input type="checkbox"/> Listing Site Inspection	<input checked="" type="checkbox"/> Peer Review Corrections/Finalize
<input type="checkbox"/> Hazard Ranking System	<input type="checkbox"/> Other (See VI below)

IV. PRIORITY

☐ High(*) ☒ Medium ☐ Low

V. PREFERRED DEADLINE:

Date: _____

VI. EXPLANATION OF TASK (* To include justification for high priority):

*Please finalize addressing the attached
SIO to RCRA comments.*

If there are any questions or disagreements concerning the above comments, please call the SIO listed above at 597-8333 prior to finalizing the report.

VII. To be completed by FIT RPO only:

Task complete date by FIT 5/1/91

Hours allocated _____

Gregory Ham
RPO Concurrence

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, PA 19107

SUBJECT: EPIPA Arco Chemical Company
PA-2600

Date: February 2, 1990

From: Lynnette Elser, SIO

To: Subject File

I have read the subject EPIPA & recommend the following:

- ① 1 Section 1.3, paragraph 2 & section 3.1
Please use stream miles. *check #'s against geo.*
- ② 2 Section 2.5 & Section 4.1.2
Please identify wastes by their code # and common name.
- ③ 3 Section 3.1, paragraph 3
Please identify any sources of water that Chester Water Authority uses within the study area or state that no sources of water that are used by CWA are within the study area. (The report only addresses CWA's main source of water.)
- ④ 4 HRS - Surface water
Population served was circled as 20 but that figure was not carried over and counted in the total targets score. Also, verify that Geist Reservoir is within three stream miles. See comments 6.
- ⑤ 5 Section 3.1
Please state that there are no homewells in the study area or state how many homewells there are in the study area.
- ⑥ 6 Section 3.5, 3.2, 3.1 and cover letter
Geist Reservoir is given as 2 miles S, 5.7 stream miles & 2.6 S/SE of the site. Please clarify, possibly the lacustrine littoral wetland that is mentioned in section 3.7 is also Geist Reservoir. It is stated as 4.25 stream miles S of the site. If Geist Reservoir is outside the study area when measured in stream miles, please change the HRS surface water targets.

If you have any questions, please call me at (215) 597-8333

ARCO CHEMICAL COMPANY
PA-2600

Comments:

(7)

1. Section 4 Waste types and quantities, page 4-1

The description of all the waste codes should be included. Also, the description for U105 should be methyl-2,4-dinitrobenzene.

no, it's

1-methyl-2,4-dinitrobenzene

per ~~Reg.~~ 40 CFR 261.33(f)
(7-1-85)